

BA-24-3b South Shore of The Pen/Bayou Dupont Shoreline Protection/Marsh Creation

Coast 2050 Strategy - Coastwide – Dedicated dredging to create, restore or protect wetlands and Strategy #24 – Preserve bay and lake shoreline integrity on land bridge.

Project Location - Region 2, Barataria Basin, Jefferson and Plaquemines Parishes, on the south shore of the Pen and both sides of Bayou Dupont from The Pen east and south toward Round Lake.

Problem - The marsh on the south shore of The Pen is eroding rapidly. Both sides of Bayou Dupont from The Pen to near Round Lake have deteriorated badly leaving large areas of open water. Probable causes of the loss are shoreline erosion on the shore of The Pen. Subsidence/compaction of the soil and possibly vegetation loss from increased salinity levels and altered hydrology have caused the loss along Bayou Dupont.

Goals - The goal is a) to restore viable marsh in several open water areas on the south shore of The Pen and along both sides of Bayou Dupont; b) to restore nearly four miles of Bayou Dupont bankline; and c) reduce the rate of shoreline erosion along the south shore of The Pen

Proposed Solution – An earthen retaining levee would be built along the south shore of The Pen with the inside toe of the levee on the shoreline and the levee extending out into The Pen. There would be no fish access across the levee. Material would be dredged from The Pen and Bayou Dupont to fill a 275-acre area. The levee would be planted. Material would be dredged from Bayou Dupont with a small dredge to create marsh in four semi-confined disposal areas along the bayou. A meandering three-foot “terrace” with a top width of 23 feet would protect about 4 miles of eroding bank along Bayou Dupont. The terrace would be planted.

Project Benefits - The project would benefit 162 acres of marsh and 536 acres of open water for a total of 698 acres. Approximately 476 acres of marsh would be created/protected over the course of the 20-year project life.

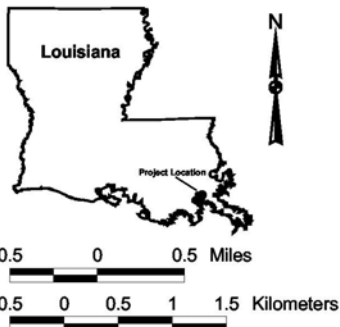
Project Costs – The total fully funded cost is \$28,486,200 and the fully funded first cost is \$27,110,100.

Risk/Uncertainty and Longevity/Sustainability – There is a moderate degree of risk associated with this project because of the uncertainty of the poor foundation in the area. This project should continue providing benefits beyond 20 years after construction because large amounts of marsh would be created initially.

Sponsoring Agency and Contact Persons – Corps of Engineers

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- Marsh Creation Area
- Shoreline Protection/
Marsh Creation

Data Source:
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

LA Department of Natural Resources
Coastal Restoration Division

Map Date: November 3, 2001
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1990 SPOT

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Region 2

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